

Serial No. **09/939,558**  
Amdt. dated July 21, 2006  
Reply to Office Action of May 12, 2006

Docket No. **P-0240**

### **REMARKS**

Claims 1-28 remain pending in this application.

In the Office Action, claims 1-5, 8, 9, 13, 15-20 and 28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,757,281 (Irish) in view of U.S. Patent No. 6,208,649 (Kloth). Claims 6, 7, 10-12, 14 and 21-27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Irish in view of U.S. Patent No. 6,256,314 (Rodrig et al.).

#### **35 U.S.C. § 103 Rejections**

Claims 1-5, 8, 9, 13, 15-20 and 28 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Irish in view of Kloth. Applicant has discussed the deficiencies of Irish in Applicants previously filed response and reassert all arguments in that response. Applicant respectfully traverses these rejections and provides the following additional remarks.

Kloth discloses a received virtual local area network (VLAN) mapping technique that enables centralized control of broadcast domains by a switch capable of supporting different protocols carried within frames that are distributed throughout a computer internetwork. Associated with each incoming frame received at the switch are characteristics such as protocol type and/or subnet information, and associated with each input port of the switch are characteristics such as VLAN and/or index values. Utilizing certain of these characteristics, a

derived VLAN value is generated that allows users to create arbitrary VLAN domains and reduce broadcast traffic received by stations of the domains.

Regarding claims 1, 13, 15, 19 and 28, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of these claims. For example, the Examiner asserts that Irish discloses broadcasting a first ARP request packet transmitted from a source host of the number of hosts to a source VLAN of the plurality of VLANs, at col. 2, lines 35-40 and col. 8, lines 12-23 and fig. 1. However, these portions merely disclose that an ARP and a local cache are used to map the destination IP address to the appropriate destination MAC address, and that if the MAC layer address of the destination is recognized and supported, the route server broadcasts an address request for the MAC layer address of the destination on the correct sub-network or VLAN sub-network or VLAN which the route server recognizes and supports. This is not broadcasting an ARP request packet on a source host to a source VLAN of a plurality of VLANs belonging to the same IP subnet, as recited in the claims of the present application. In fact, these portions of Irish actually teach away from the limitations in the claims of the present application in that the disclosure relates to a situation where the MAC layer address of the destination is not part of the same sub-network or VLAN as the host (see, col. 8 lines 1-23).

The Examiner further asserts that Irish discloses receiving a second ARP response packet from the destination host and transmitting a unicast packet originating from the source host to

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the destination host using a MAC address of the destination host that is included in the received second ARP response packet, at col. 8, lines 12-49. However, as noted previously, these portions of Irish relate to the situation where the MAC layer address of the destination is not part of the same sub-network or the VLAN. Further, the limitations in the claims of the present application relate to transmitting a first ARP response packet, and broadcasting a second ARP request packet to a destination VLAN, and receiving a second ARP response packet from the destination host, and then transmitting a unicast packet originating from the source host to the destination host using a MAC address of the destination host included in the received ARP response packet. These limitations as arranged in the claims of the present application are neither disclosed nor suggested in Irish. The Examiner is not permitted to use impermissible hindsight in reading the limitations of the claims of the present application back into the cited reference.

The Examiner admits that Irish does not disclose or suggest the plurality of VLANs belonging to the same IP subnet, but asserts that Kloth discloses these limitations at col. 4, lines 44-66. However, these portions merely mention classifying VLANs “on-the-fly” without any further details, and examples of problems that exist with attempts to control broadcast domains for different protocols carried by frames since one domain is not necessarily a subset of the other. However, this is not broadcasting a first address resolution protocol request packet transmitted from a source host of the number of hosts to a source VLAN of the plurality of

VLANs, the plurality of VLANs belonging to the same IP subnet, as recited in the claims of the present application. Moreover, Applicant submits that there is no suggestion in either Irish or Kloth to combine these references. Therefore, one of ordinary skill in the art would have no motivation to combine these references. Irish is related to exchanging packets between networks using switches and without using routers for routing the package to the destination, whereas Kloth is related to a derived VLAN mapping technique that enables centralized control of broadcast domains by a switch capable of supporting different protocols carried within frames. These disclosures are directed to solving entirely two different problems. One of ordinary skill in the art would have no motivation to combine these references since there is no teaching, suggestion, or motivation to do so found explicitly or implicitly in the references themselves. An obviousness rejection requires that there be some suggestion in the cited references to combine the references. This does not exist here.

Regarding claims 2-5, 8, 9, 16-18, 20, Applicant submits that these claims are dependent on one of independent claims 1, 13, 15 and 19 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims.

Accordingly, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 1-5, 8, 9, 13, 15-20 and 28 of the present application. Applicant respectfully requests that these rejections be withdrawn and that these claims be allowed.

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Claims 6, 7, 10-12, 14 and 21-27 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Irish in view of Rodrig et al. Applicant respectfully traverses these rejections and submits that these claims are dependent on one of independent claims 1, 13 and 19 and, therefore, are patentable at least for the same reasons noted previously regarding these independent claims. Applicant submits that Rodrig et al. does not overcome the substantial defects noted previously regarding Irish and Kloth.

Accordingly, Applicant submits that none of the cited references, taken alone or in any proper combination, disclose suggest or render obvious the limitations in the combination of each of claims 6, 7, 10-12, 14, and 21-27 of the present application. Applicant respectfully request that these rejections be withdrawn and that these claims be allowed.

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### **CONCLUSION**

In view of the foregoing amendments and remarks, Applicant submits that claims 1-28 are now in condition for allowance. Accordingly, early allowance of such claims is respectfully requested. If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, Frederick D. Bailey, at the telephone number listed below.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,  
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